AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all previous listings and amendments to the claims.

1. (PREVIOUSLY PRESENTED) A method for run-time configurable caching of factory objects, comprising:

launching an object-oriented application of a computer containing a plurality of factory objects operable to create objects;

creating by a cache factory object of a plurality of cache factory objects under control of the application a cache object that provides an interface between the application and a cache having a plurality of objects;

configuring the cache object by the application;

associating a factory object of the plurality of factory objects with the cache object by the application; and

cooperatively operating, by the factory object and the cache object, to manipulate one or more objects contained in the plurality of cache objects in response to a request from the application.

2. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the cache object contains a plurality of methods to add an object to the cache, remove an object from the cache, and find an object in the cache.

3. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the cacheable factory object contains a plurality of methods to get an object from the cache, and to couple the cache object to the cacheable factory object.

4. (CANCELED)

5. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the factory object contains a plurality of methods to create an object, obtain an object identifier, and get a database connection object.

6. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the factory object and the cache object derive from a common base object.

7. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the cache object further comprises:

a plurality of cache statistics objects; and

a plurality of cache configuration objects.

8. (PREVIOUSLY PRESENTED) The method of claim 7, wherein the plurality of cache statistics objects contain a plurality of methods to determine the number of cache accesses, the number of times a cache access returned an empty result, the size of a cache, and a reset command and wherein configuring the cache object further comprises the application configuring one or more of the plurality of methods.

9. (PREVIOUSLY PRESENTED) The method of claim 7, wherein the plurality of cache configuration objects contain a plurality of methods to empty a cache, set and get a maximum cache size, and set and get the cache type and wherein configuring

the cache object further comprises the application configuring one or more of the plurality of methods.

10. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the application configuring the cache object, further comprises:

setting a cache type for the cache object; and

setting a maximum size for the number of objects contained in the cache object.

11. (PREVIOUSLY PRESENTED) The method of claim 10, wherein the cache type for the cache object determines how each object in the cache is removed from the cache.

12. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the application interacts with the factory object to manipulate the one or more objects located in the plurality of cache objects.

13. (PREVIOUSLY PRESENTED) The method of claim 12, wherein manipulating the one or more objects further comprises adding one or more objects to the cache object.

14. (PREVIOUSLY PRESENTED) The method of claim 13, wherein adding the one or more objects located in the cache object, further comprises:

the application sending a message to the cacheable factory object of the plurality of cacheable factory objects to add the one or more objects to the cache object coupled to the cacheable factory object;

the cacheable factory object receiving the message and sending a message to the cache object to add the one or more objects to the cache coupled to the cache object.

15. (PREVIOUSLY PRESENTED) The method of claim 12, wherein manipulating the one or more objects further comprises removing one or more objects from the cache object.

16. (PREVIOUSLY PRESENTED) The method of claim 15, wherein removing the one or more objects located in the cache object, further comprises:

the application sending a message to a cacheable factory object of the plurality of cacheable factory objects to remove the one or more objects located in the cache object coupled to the cacheable factory object;

the cacheable factory object receiving the message and sending a message to the cache object to remove the one or more objects from the cache coupled to the cache object.

17. (PREVIOUSLY PRESENTED) The method of claim 16, wherein configuring the cache object further comprises:

setting a cache type for the cache object; and

setting a maximum size for the number of objects contained in the cache object.

18. (PREVIOUSLY PRESENTED) The method of claim 17, wherein the cache type for the cache object determines how each object in the cache is removed from the cache.

19. (PREVIOUSLY PRESENTED) The method of claim 12, wherein manipulating the one or more objects further comprises locating one or more objects from the cache object.

20. (PREVIOUSLY PRESENTED) The method of claim 19, wherein locating the one or more objects located in the cache object, further comprises:

the application sending a message to the cacheable factory object to locate the one or more objects located in the cache object coupled to the cacheable factory object;

the cacheable factory object sending a message to the cache object determining whether any of the one or more objects are contained in the cache object;

if able to locate the one or more objects, the cache object returning any of the one or more objects contained in the cache object; and

if unable to locate the one or more objects, the cacheable factory object accessing the one or more objects from a database, and adding the one or more objects to the cache object.

21. (PREVIOUSLY PRESENTED) The method of claim 12, wherein manipulating the one or more objects further comprises identifying which of the one or more

objects contained in the cache object is not the same as the corresponding one or more objects contained in a database.

22. (PREVIOUSLY PRESENTED) A structure for run-time configurable caching of factory objects, comprising:

one or more factory objects, coupled to an object-oriented application of a computer and operable to create objects usable during run-time of the application;

one or more cacheable factory objects operating under the control of the application; and

one or more cache objects created by the one or more cacheable factory objects under control of the application, associated with one or more corresponding factory objects by the application, and operable to provide an interface between the one or more factory objects and a cache having a plurality of objects,

wherein after the application configures the one or more cache objects and associates each factory object of the one or more factory objects with a corresponding one of the one or more cache objects created, a factory object of the one or more factory objects and a corresponding cache object of the one or more cache objects are cooperatively operable to manipulate one or more objects contained in the plurality of cache objects of the cache in response to a request from the application.

23. (ORIGINAL) The structure of claim 22, wherein the object-oriented application interacts with the plurality of cacheable factory objects in order to manipulate one or more objects contained in the plurality of cache objects.

24. (ORIGINAL) The structure of claim 22, wherein a plurality of objects contained in the one or more cache objects can be uniquely identified.

25. (PREVIOUSLY PRESENTED) The structure of claim 22, wherein the plurality of cache objects contain a plurality of methods to add an object to the cache, remove an object from the cache, and find an object in the cache.

26. (ORIGINAL) The structure of claim 22, wherein the plurality of cacheable factory objects contain a plurality of methods to get an object from a cache, and to couple a cache object to a cacheable factory object.

27. (ORIGINAL) The structure of claim 22, wherein the plurality of cacheable factory objects derive from a corresponding plurality of factory objects.

28. (ORIGINAL) The structure of claim 22, wherein the plurality of factory objects contain a plurality of methods to create an object, obtain an object identifier, and get a database connection object.

29. (ORIGINAL) The structure of claim 22, wherein the plurality of factory objects and the plurality of cache objects derive from a common base object.

30. (ORIGINAL) The structure of claim 22, further comprising:

a plurality of cache statistics objects; and

a plurality of cache configuration objects.

31. (ORIGINAL) The structure of claim 30, wherein the plurality of cache statistics objects contain a plurality of methods to determine the number of cache accesses,

the number of times a cache access returned an empty result, the size of a cache, and a reset command.

32. (ORIGINAL) The structure of claim 30, wherein the plurality of cache configuration objects contain a plurality of methods to empty a cache, set and get a maximum cache size, and set and get the cache type.

33. (ORIGINAL) The structure of claim 30, wherein the plurality of cache statistics objects and the plurality of cache configuration objects derive from the common base object.

34. (PREVIOUSLY PRESENTED) The method of claim 1, wherein associating the factory object with the cache object allows any object created by the factory object to use the cache object.

35. (PREVIOUSLY PRESENTED) The method of claim 1, wherein after associating the factory object with the cache object, the application directly requesting an object of the one or more objects contained in the cache object by sending a get message to the factory object.

36. (PREVIOUSLY PRESENTED) The method of claim 1, wherein each factory object of the plurality of factory objects may interface with the cache through a plurality of corresponding cache objects created by the plurality of cache factory objects.